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AUTHOR Locke, Lawrence F.
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ABSTRACT

Qualitative research is a model for systematic, data-based inquiry. It has been used widely in the social sciences, and it has a growing acceptance in educational research. Its purpose is to describe and understand a particular, bounded social setting. The differences between quantitative and qualitative research involve the methods employed at the tactical level and the assumptions held by the investigator at the strategic level. As a model for inquiry, qualitative research is interpretive. A key assumption holds that it is not possible to understand people and their actions unless they are taken within the whole context. Qualitative research sometimes is called "naturalistic" because it is not interventionist, and it involves observations of settings in their natural state. Suggestions for avoiding subject falsification include: (1) being aware of risk and not letting down guard; (2) remembering that most dissembling is triggered by perceived threat; (3) remembering that faking is difficult to sustain over time; and (4) following procedures for cross-checking subject accounts. (BAE)

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THE QUESTION OF QUALITY IN QUALITATIVE RESEARCH

Lawrence F. Locke

University of Massachusetts

(10/17/86)

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THE QUESTION OF QUALITY IN QUALITATIVE RESEARCH

Most of you will not have missed the humor, or at least the irony, produced by inviting someone to talk about measurement problems in qualitative research. As qualitative researchers are commonly thought not to measure anything, there is the question of what on earth I am going to talk about.

Given those circumstances, it seems best to assume that the Council's Program Committee invented my assignment in the spirit of playfulness, rather than malice. It is in that same spirit, then, that I will step gingerly around the paradox of measurement in qualitative research, and share with you some concerns about quality in qualitative inquiry.

There are a number of questions about qualitative research which, on the surface at least, appear to be both familiar and reasonably accessible to anyone schooled in measurement theory. One approach to these issues is to take them one by one, in the time-honored style of Campbell and Stanley (1963), examining how variations in method produce different consequences for the trustworthiness of data and subsequent analytic assertions.

That process would make an interesting and perhaps useful little paper for an obscure journal, but on a warm afternoon after a good lunch, it would succeed only in being enormously boring, even to measurement aficionados. Accordingly, this will be a less structured presentation, and one in which you can play an active part.

First, we need to get straight concerning what we are talking about here. Definitions are required which will serve to bring newcomers into the conversation, and which will reduce faulty communication among those who already know the territory. For those who may wish to follow-up by pursuing some of the issues into the literature, a list of references has been provided. I will try to drop the names of authors whose work is particularly useful or is commonly associated with various points in the discussion.

This brief introduction is limited by two exigencies: the fact that most of this audience was schooled exclusively in the quantitative tradition, and the constraint that we shall have only a short time together. With that in mind, if your interest is stimulated it would be wise to consult one of the standard textbooks for a more complete account. If you have some background in social science, Lincoln & Guba (1985) would be appropriate, while Goetz & LeCompte (1984) might be more comfortable for those who have worked primarily in natural science. For my money, however, the eclectic Bogdan & Biklen (1982) remains the best primer for "What is it?" and "How is it done?"

Qualitative research is a model for systematic, data-based inquiry. It has been used widely in the social sciences. Because schools, classrooms and gymnasia are socially structured settings, and the work of teaching and learning are social processes, this form of investigation has found growing acceptance in educational research (Bolster, 1983; Erickson, 1986; Rist, 1977; Shulman, 1986; Soltis, 1984; Templin & Griffin, 1985; Woods, 1985; Zimpher & Ashburn, 1985). Ubiquitous as it may have become, however, this model remains

a strategy for inquiry that is profoundly different from what this audience would regard as conventional science. To use the popular jargon, qualitative study involves a different paradigm (Burrell & Morgan, 1979; Kuhn, 1970; Morgan, 1983; Popkewitz, 1984; Tuthill & Ashton, 1983).

The differences fall into two categories: the methods employed at the tactical level (how to do it), and the assumptions held by the investigator at the strategic level (how you think about the world and what you are doing). If both tactics and strategy differ from the conventional, it is surprising to find that the purpose of qualitative research sounds reassuringly familiar; to describe and understand a particular, bounded social setting (any community, group, role or locus for human interaction).

To accomplish the ends of thorough description, the methods employed seem unremarkable enough, even if unfamiliar as science. As with quantitative study, there are endless permutations for arranging method, and no particular tactic can be regarded as the absolute hallmark of qualitative research. A common pattern for a study done through direct observation in the field, what frequently is called naturalistic research, would involve all or some of the following:

1. entering the world of the participants,
2. engaging in careful observation for, in relative terms, a prolonged period,

3. direct interaction with data sources,
4. accumulating data in the form of field notes, interview records, documents, maps, photographs, and perhaps even some numerical data that reflect important aspects of the context,
5. construction of descriptions which employ the words of the participants and which are intended to reflect their understanding of people and events,
6. progressive shaping and re-shaping of both questions and methods during the process of investigation,
7. a continuous search within the total data set for regularities and connections which will answer the primordial question "What's going on here?",
8. systematic analysis for the inductive purpose of finding theoretical assertions which explain the data (rather than the use of data to test theory), and
9. preparation of a report in which description is combined with assertions which are directly grounded in the data record.

A qualitative research report, when pared down for journal publication, normally contains some elucidation of the question(s) which motivated the study and how they fit into the existing knowledge base, a brief account of methods used for data gathering and analysis, extended description of the social context of interest, selected vignettes which provide a sense for what it is like to be in the context, and a closing section in which the investigator uses the data to build analytic assertions that argue "This is what's going on there."

In anthropology this may be called ethnography, as in the picture of culture provided by Mead's Growing up in New Guinea (1930). In sociology it may be called microethnography, as in White's Street Corner Society (1943). In educational research, such studies may be called almost anything, but may be reasonably represented by Smith & Geoffrey's The Complexities of an Urban Classroom (1968), Cusick's Inside High School (1973), or Becker's The Boys in White (1961). At present, the best known example in physical education is Griffin's (1983, 1984, 1985a, 1985b, 1985c) series of studies concerning various aspects of life in the middle school gymnasium.

As a model for inquiry, qualitative research is unabashedly interpretive. There is central concern with how people understand the world, and thus with their personal experience. A key assumption holds that it is not possible to understand people and their actions unless they are taken within the whole context. The participants in a social context are presumed to be continuously working at the task of making sense out of their experience. Different people within that context, the researcher included, will construct that sense differently. The investigator's function is to listen, watch and reflect over time in an attempt to reconstruct how the participants understand what is going on.

"What's going on here?" may sound trivial on first encounter, but it is not, and for some specific reasons. First, we probably know a lot less than we think about the social contexts in which we live. Having just spent five long days of careful observation at

at our national headquarters in Reston without achieving even the slightest insight into what is going on there, I can assure you that it is not easy to figure out who is doing what, to whom, and why, even within the confines of a small building.

If you are an outsider, there always is the problem of entry, getting inside. If you are an insider, the problem is overfamiliarity, as well as the fact that there often are things we really don't want to understand in any setting where we are a participant. Clyde Kluckhohn once observed that the fish would be the last creature to discover water. Likewise, the last person to understand the dynamics of a gym class might well be a physical educator.

A second fact which gives that seemingly trivial question substance is the degree to which a thick account of detail is required to understand how things really work. Out of necessity, we conduct our daily lives mostly through the use of generalizations which satisfy pragmatic purposes without explaining anything. To say that "those students are on task" is a useful generalization, but it tells nothing of why, or how the task relates to their capabilities, to other tasks, to the intentions of the teacher, to what controls the students' behavior, or to how they feel about their work. Genuine understanding can only be constructed out of such details.

A third measure of the potential importance in trying to understand what is happening in a particular setting is the degree to which the local meaning of events can vary widely across apparently

similar contexts. In one physical education class, to ask a student a public question is normal and regarded by all as appropriate behavior. In another class, similar in all appearances, to ask a public question is to engage in a punitive attack, and is so understood by all participants. Far more often than we may wish to admit, to know "this class" requires that we actually study "this class."

Fourth and finally, the real power of that seemingly unworthy target for serious inquiry "What's going on here?" rests in its capacity to change the inquirer. Close examination of the commonplace can yank us out of the perceptual rut which is the cumulative result of learning to cope within a social setting. Shweder (1986) recently called ethnography "the exorcism of the commonplace." In exactly that sense, good qualitative reports can make the familiar seem strange, forcing us to reconsider our convenient and often defective assumptions. When focused on someone else's reality, ethnographic accounts can make the strange seem familiar, leading us to new possibilities for our own behavior.

The various names given to what I am calling qualitative research are in themselves an obvious source of confusion. Unlike the stable and familiar system language of quantitative science, the nomenclature here is shifting and still growing, much of it unfamiliar and full of nuances.

Qualitative research sometimes is called "naturalistic" because it is not interventionist and involves observation of settings in

their natural state. It also is called "fieldwork" because investigators go to the data source, and "interactive" or "participant observation" because the researcher may elect to take an active part in social commerce at the study site.

Because every setting has boundaries, qualitative research also may be treated as "case study", and in every case the result is "descriptive" inquiry because of the emphasis on portraying detail of context. Given the characteristic search for the insider's viewpoint, it often is called "interpretive" research, while the emphasis on inductive analysis has sometimes given it the name of "hypothesis generating" or "grounded theory" research.

Until you become an insider and can identify a specific preference for a particular label, I suggest sticking with what people most readily recognize -- qualitative research. As with the term "physical education," it may be far from accurate, but it has the virtue of allowing people to engage in conversation without becoming mired in nominalism.

Names all aside, what I have described to this point could be considered little more than a methodological variation on conventional science; an offshoot from the same roots that gave us astronomy, biology and the whole panoply of natural and social science. That casual conclusion might be reinforced by the fact that it is commonplace to see experimenters interviewing subjects, or ethnographers using standardized questionnaires (Rossman & Wilson, 1984; Schofield & Anderson, 1984).

To assume that at root qualitative inquiry truly is like conventional quantitative science, however, is an error. If you probe beyond methods to the level at which researchers think about their work, the differences are substantial and even dramatic. It is the focus of qualitative research on the participant's own view of the world that betrays the different origins of the qualitative paradigm. That focus on individual experience flows from the assumption that reality is a social construction, something not located outside of human experience. That vantage point demands a redefinition of truth. It demands another way of knowing.

To describe things in terms of polar opposites is to caricature the real world of science. Qualitative and quantitative are not at the opposite ends of any continuum. To properly clarify the root difference between the two models of inquiry, however, it may be helpful to describe how my own assumptions as a researcher would differ in the two cases.

I can do a study of teaching effectiveness by using a systematic observation instrument in a physical education class. I assume that class is a real set of interactions with a temporal and spatial locus. The events are complex and often subtle, but with patient study I believe they are knowable. Certainly other classes will be different, just as this class will show fluctuations from day to day, but beneath all are the regularties of lawful human behavior. I can tease out some of those connections if I use the right methods, obtain valid and reliable data, and make careful interpretations.

I take one thing at a time, breaking complexity into units, partialing out extraneous elements so the particular is revealed. I observe procedures which separate my own person from the context and from any influence on the accumulating data. I struggle to provide for public verification of the data so that I can assume they are isomorphic to the real events of the class. At the end, often only after a long series of studies performed by many investigators, we can knit the connections found into a larger fabric of theory, the nomothetic net that maps the rules of behavior and social order. With that we can predict the events of future classes, train teachers more wisely, and exert control over the learning of our clients.

In contrast, I can go to the same gym, to the same class, and do a qualitative study. The starting assumption will be that the class exists in a way that is different for every person involved, those differences flowing from their biographies and their relative positions in the social context. I do not imagine that there is one "real" class out there in the gym, a single set of events waiting to be discovered and recorded by me. The only realities which concern me are the ones constructed by each participant, and the one to be reconstructed in my own mind through analysis of the data.

I do not believe that another observer would record precisely the same data as field notes, even if fully trained and collaborating with me in defining the primary dimensions of interest and the perspective to be employed in making sense of the data. I accept the class as a shifting network of interacting perceptions which are rarely the same for any two individuals, and which always change while they are lived.

As I am the primary research instrument, my biography and values will be brought to the setting. Although I may use a multitude of tactics to clarify and limit how my person filters the data, in the end I understand that it is neither possible nor desirable that I separate myself from the setting, the participants, the data, or the analysis.

My way of knowing demands that the particular be understood only with reference to the whole. Thus, I work to keep my understanding of each participant imbedded in their own interactive framework. I stay, attend to the grubby stuff of daily detail, ask questions, doubt what I am told, cross check, develop close relationships with some of the participants and gradually sharpen my initial "foreshadowing" of what is happening, altering my methods and data sources accordingly.

Clearly, this is a different ballgame than quantitative inquiry, and the difference rests more in how I understand the world and my role as a researcher, than it does in methods of data acquisition. If your primary interest is measurement, the assignment of numbers to events according to rules, then indeed we are far afield.

If the meaning of events is a primary target for qualitative research, and the meanings which we assign to our experience are by their nature not numerical, then it might appear that ethnography will be a spectator sport for those interested in measurement and evaluation as applied to education. This would be so, unless measurement were itself redefined -- which may account for why

evaluation specialists, both academic and commercial, have moved so swiftly of late to add sophisticated forms of qualitative inquiry to their repertoire.

It would be misleading if I did not point out that some individuals have concluded that if I truly hold a qualitative perspective, and you are a conventional experimental scientist, we will be unable to engage in any useful conversation about our respective work. Our assumptions simply will be too divergent to say anything intelligible to each other.

Whether that is true or not, we already have some problems in physical education which require attention to clear communication. Graduate students will want to do qualitative theses and dissertations. Editors with their reviewers will be confronted by manuscripts from people who claim to have done qualitative research. Clearly, there will be no place to hide.

To the degree that we all are concerned about good research and keeping pollution out of the body of knowledge, we share a common starting place. To the degree that words like reliability and validity mean something different to qualitative and quantitative investigators, that starting place is likely to prove tricky and dangerous ground.

To further complicate all of this, if that is possible, it is going to be difficult to get assistance from the people who know the most about qualitative research. This is because there is a vigorous debate going on about how to properly do good qualitative research.

If there are a Smith & Heshusius (1986) who claim all cross-paradigm conversation is impossible, there are Kirk & Miller (1986) or Fielding & Fielding (1986) who find large areas of complementarity in the two world views. Somewhere on that same continuum are LeCompte & Goetz (1982) who can talk realibility and validity as comfortably as any experimentalist, Lincoln and Guba (1985) who don't want to play by conventional quantitative rules, but are much concerned about the trustworthiness of qualitative data, and Miles & Huberman (1984a, 1984b) who are inclined to say "a pox on both your houses!", leaving epistemology to the philosophers and focusing instead on systematizing methods of data display and analysis.

If we want to examine qualitative research from a measurement perspective, it is clear that we will have to muddle along by picking through the litter created by a science still in the process of deciding what it wants to be. I am convinced, however, that it will be worthwhile for you to try, because that vigorous debate has spread suddenly to physical education. Bain (1986) has given a favorable nod to qualitative research in pedagogy, Earls (1986) has authored a new monograph devoted to qualitative research, and I have produced several more ecumenical papers noted in the reference list (Locke, 1986, 1987; Placek & Locke, 1986).

Things began to heat up, however, when Safrit raised the battle flags in her essay for the most recent Academy Papers (1987). In his paper for the Heidelberg World Congress, Siedentop (1986) made clear that he, for one, is not in for a love affair with qualitative

methodology. The riposte from Schempp (1987) came quickly and though couched in the most conciliatory tones, had a sharp point and lethal intent.

The tussle clearly is underway. Not all of you will want to join in, but many of you can enjoy the fun. If we have learned something from past experience with in-house debates, perhaps we all will profit from a contest of alternative paradigms.

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[Editorial Note: At this point the speaker provided a specimen of qualitative research, followed by a brief critique of the study. Readers who are interested will find the original report in the American Educational Research Journal (Allen, 1986). Following this, the audience participated in listing questions which might be raised concerning the specimen study.]

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These questions include many of those most commonly raised about qualitative research and, given the sampling bias represented in an audience attending a measurement and evaluation symposium, are particularly representative of those asked by people who are well versed in the quantitative tradition. The common critical questions cluster around 10 topics.

1. Generalizability, questions raised related to external validity,
2. Truth, questions related to internal validity,
3. Objectivity, questions related to researcher bias,

4. Reliability, questions about public verification of data,
5. Reliability of analysis, questions about the replicability of process in deriving conclusions from data,
6. Reactivity, questions about possible contamination produced by the investigator's presence,
7. Subject falsification, questions about the impact of social desirability on the quality of data,
8. Triviality, questions about finding the commonplace and discovering what everyone already knows,
9. Causality and association, questions about the use of grounded theory technique to infer cause and effect relationships,
10. Ethics, questions about intrusion, protection of participants, and deception.

What we learn from this exercise is that measurement experts in physical education can raise serious questions about every aspect of qualitative research. These are the questions that raise issues about the meaning of "quality" in qualitative research.

It isn't possible to undertake responses here to each of those questions. In part that is because of the limitations imposed by the symposium format, but it also is because I lack the competence to undertake such a formidable task. What I have learned about qualitative research as a student, a novice investigator, and a research advisor, assures me that there are answers worthy of your attention. Those same experiences, however, have made me cautious. Again, I refer you to the list of references and invite you to see what the experts say about our list of critical questions.

To close, it is only fair, given the title of this paper, to undertake answers to at least several of the questions, if only to provide you with some sense of the problems which are likely to attend even an honest attempt to communicate across the gulf of alternative paradigms.

Are the results generalizable? How do you know that what you learn from qualitative study will transfer to a similar setting? My first response is that I don't know they will. Certainly there is nothing built into qualitative method that can guarantee what qualitative researchers call "applicability."

Some designs are intended to yield more confidence in this area. Multi-site studies are done, as is purposive participant sampling. In most studies, the focus is on the local and idiographic. Although some qualitative scientists do expect to locate cross-cutting regularities, there is, overall, far less interest in generating universal laws.

The typical response to questions about generalizability is to provide rich description of context in the report, and then leave the question of applicability to the reader. Transferability, then, becomes a function not of method or sample, but of recognition by a participant at some other site, "Yes, that's exactly how it works here!"

What about researcher bias? How do you know that qualitative researchers don't just find whatever they expect, or wish, to find? Again, my first response has to be that I don't. Every investigator

has a biography and a set of expectations about their research. No one is a blank slate. There are well established techniques, however, directed at raising qualitative research above the level of artistic story telling. One is awareness of this problem by the investigator. Another is the use of second party checks such as peer debriefing and study audits. Critical theorists and others make deliberate use of their value dispositions as a way of making such influence systematic and public. Even the time-honored traditions of separating field observation notes from comment and speculation within the field log, and maintaining a separate personal journal of questions and concerns, serve in a practical way to reduce the accidental imposition of the researcher's personal agenda.

My own experience dictates that outsiders too often imagine qualitative research to consist of a flying visit followed by an impressionistic essay. I can testify that long stays in someone else's gym, mountains of field notes, the seemingly endless task of coding data, and the lonely journey through an analysis which you fear will reveal nothing of interest, all serve to guarantee that you won't persevere to the report writing stage if you think you already know "what's going on," before you begin!

I will close by tackling a question that is a bit more fun. What about subject falsification? Don't those people lie to you, either intentionally or unintentionally? Of course they do. We all do that sort of thing (present company excepted, of course).

There is the power of maintaining a front of social desirability, the natural inclination to manage impressions. There also is the clear danger of collusion among participants to protect what they deem to be sensitive facts about life inside the setting. Finally, there is the simple impulse to be disruptive, to give the outsider a hard time.

What can the qualitative researcher do? In fact, there is a good deal to do. First, you can be aware of the risk and never let down your guard. Second, by remembering that most dissembling is triggered by perceived threat, you will present yourself as unconditionally accepting and non-evaluative, and thereby give less cause for people to lie. Remember too that faking is exceptionally difficult to sustain over time. The longer you stay and the more you become a commonplace of the setting, the more genuine people become. Finally, there are standard procedures for cross-checking subject accounts, a collection of processes that are popularly known as "triangulating."

Penetrating false data is difficult, but if you hold that it is impossible, then how do we account for clinical diagnosis in medicine, automobile repair, detective work and investigative journalism? In all of those tasks the path is strewn with misleading and incomplete information. Yet we manage to cure patients, fix engines, prosecute criminals and discover fraud. Qualitative research is little different. If you are cautious, persistent, observant and honest in your dealings with participants, few will have cause to deliberately mislead you, and when they do so you are quite likely to know it.

Those may or may not seem like satisfactory responses to some tough and important questions. Sometimes I don't really know how much I believe my own answers. That, however, is precisely why we need to have exercise of the measurement and evaluation specialist's critical skills in the coming dialogue about quality in qualitative research.

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